

IN THE CLAIMS:

Please cancel Claims 69, 72, 76 and 79 without prejudice.

Please amend Claims 66, 67, 73, 74, 75 and 80 as follows:

66. (Amended) An outline forming apparatus comprising:

Sub H1
storing means for storing pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a [path] curve of second degree or more on which the first outline point moves to a second outline point of a pattern having a second weight;

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input means for inputting weight [information] of a pattern;

[moving means for moving the first outline point based on the weight information input by said input means and the vector information stored in said storing means to obtain a position of a third outline point;] and

[generating means for generating outline data corresponding to a pattern having a weight indicated by the input weight information based on coordinate data of the third outline point]

converting means for converting the coordinate data corresponding to the first outline point into coordinate

data corresponding to a third outline point of a pattern
having the input weight based on the vector information.

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H1
67. (Amended) The outline forming apparatus
according to Claim 66, further comprising output means for
outputting a pattern having [a weight corresponding to the
input weight information] the input weight, based on [the
outline data generated by said generating means] coordinate
data corresponding to a third outline point obtained by said
converting means.

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H2
73. (Amended) An outline forming method for an
apparatus which stores pattern data which includes coordinate
data corresponding to a first outline point of a pattern
having a first weight, and vector information corresponding
to the first outline point, the vector information indicating
a [path] curve of second degree or more on which the first
outline point moves to a second outline point of a pattern
having a second weight, said method comprising the steps of:

inputting weight [information] of a pattern;

[moving the first outline point based on the
weight information input in said input step and the stored
vector information to obtain a position of a third outline
point;] and

[generating outline data corresponding to a
pattern having a weight indicated by the input weight

information based on coordinate data of the third outline point]

converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector information.

74. (Amended) The outline forming method according to Claim 73, further comprising an output step of outputting a pattern having [a weight corresponding to the input weight information] the input weight, based on the outline data [generated in said generating step] obtained in said converting step.

75. (Amended) The outline forming method according to Claim 74, wherein said output step includes outputting the outline data [generated in said generating step] obtained in said converting step to a printer.

80. (Amended) A computer readable medium storing computer program code for controlling an apparatus which stores pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a [path] curve of second degree or more on which the first

outline point moves to a second outline point of a pattern having a second weight, said program code comprising:

input process procedure code for inputting weight [information] of a pattern;

[moving process procedure code for moving the first outline point based on the weight information input by said input process code and the stored vector information to obtain a position of a third outline point;] and

[generating process procedure code for generating outline data corresponding to a pattern having a weight indicated by the input weight information based on coordinate of the third outline point]

converting procedure code for converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector information.

Please add Claims 81-105 as follows:

--81. The outline forming apparatus according to Claim 66, further comprising sending means for sending coordinate data corresponding to the third outline point, obtained by said converting means.

82. The outline forming apparatus according to Claim 66, wherein the vector information includes vector data indicating a straight line.

Sub H4
83. The outline forming method according to Claim 73, further comprising the step of sending coordinate data corresponding to the third outline point, obtained in said converting step.

84. The outline forming apparatus according to Claim 73, wherein the vector information includes vector data indicating a straight line.

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Sub H5
85. An outline forming apparatus comprising:
storing means for storing pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a path on which the first outline point moves to a second outline point of a pattern having a second weight, the vector information including a plurality of vector data which indicate a plurality of different lines comprising the path and the vector information including change information indicating which vector data is to be used for each weight;

input means for inputting weight of a pattern;

obtaining means for obtaining vector data based on the change information and the input weight;

converting means for converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector data obtained by said obtaining means.

86. The outline forming apparatus according to Claim 85, wherein the pattern represents a character pattern.

87. The outline forming apparatus according to Claim 85, wherein the first weight is a minimum weight and the second weight is a maximum weight.

88. The outline forming apparatus according to Claim 85, wherein the vector information includes vector data indicating a straight line and vector data indicating a curve of second degree or more.

89. The outline forming apparatus according to Claim 85, further comprising output means for outputting a pattern having the input weight, based on coordinate data corresponding to the third outline point generated by said converting means.

90. The outline forming apparatus according to Claim 89, wherein said output means includes a printer.

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91. The outline forming apparatus according to Claim 85, wherein said converting means converts coordinate data when vector data for the input weight exists.

92. The outline forming apparatus according to Claim 85, wherein said storing means stores degree information indicates degree of a function represented by each of the plurality of vector data.

93. The outline forming apparatus according to Claim 92, wherein the degree information includes information indicating that coordinate data does not change in conjunction with weight.

94. The outline forming apparatus according to Claim 85, wherein the change information indicates a weight value at which the vector data is changed.

95. An outline forming method utilizing storing means for storing pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a path on which the first outline point moves to a second outline

Sub H7
point of a pattern having a second weight, the vector information including a plurality of vector data which indicate a plurality of different lines comprising the path and the vector information including change information indicating which vector data is to be used for each weight, said method comprising the steps of:

inputting weight of a pattern;

obtaining vector data based on the change information and the input weight;

converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector data obtained in said obtaining step.

96. The outline forming method according to Claim 95, wherein the pattern represents a character pattern.

97. The outline forming method according to Claim 95, wherein the first weight is a minimum weight and the second weight is a maximum weight.

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98. The outline forming method according to Claim 95, wherein the vector information includes vector data indicating a straight line and vector data indicating a curve of second degree or more.

Sub #8
99. The outline forming method according to Claim 95, further comprising the step of outputting a pattern having the input weight, based on coordinate data corresponding to the third outline point generated in said converting step.

100. The outline forming method according to Claim 99, wherein said output step includes outputting the outline data generated in said converting step to a printer.

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101. The outline forming method according to Claim 95, wherein said converting step includes converting coordinate data when vector data for the input weight exists.

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102. The outline forming method according to Claim 95, wherein said storing means includes storing degree information indicates degree of a function represented by each of the plurality of vector data.

103. The outline forming method according to Claim 102, wherein the degree information includes information indicating that coordinate data does not change in conjunction with weight.

104. The outline forming method according to Claim 95, wherein the change information indicates a weight value at which the vector data is changed.

Sub #9
105. A computer readable medium storing computer program code for an outline forming process which utilizes stored pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a path on which the first outline point moves to a second outline point of a pattern having a second weight, the vector information including a plurality of vector data which indicate a plurality of different lines comprising the path and the vector information including change information indicating which vector data is to be used for each weight, said program code comprising:

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input process procedure code for inputting weight of a pattern;

obtaining process procedure code for obtaining vector data based on the change information and the input weight;

converting process procedure code for converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector data obtained by said obtaining process procedure code.--